UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,201	03/07/2001	John L. Lautzenhiser	212-02	4024

79804 7590 04/13/2011

Valenti, Hanley & Robinson, PLLC
One Riverfront Plaza
401 W. Main Street
Louisville, KY 40202

EXAMINER	
NGUYEN, NAM V	

ART UNIT	PAPER NUMBER
2612	

MAIL DATE	DELIVERY MODE
04/13/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/801,201
Filing Date: March 07, 2001
Appellant(s): LAUTZENHISER ET AL.

Kevin T. Duncan
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 7, 2011 appealing from the Office action mailed August 4, 2010.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is contained in the brief.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,865,610	Muller	9-1989
5,394,035	Elwell	2-1995
5,742,228	Levy	4-1998
5,749,372	Allen et al.	5-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-5, 9-16, 31-35, 50-52, 62-63, 74 and 81-96 are rejected under 35 U.S.C. 103(a) as being unpatentable Allen et al. (US# 5,749,372) in view of Levy (US# 5,742,228).

Referring to claims 1 and 62, Allen et al. disclose an activity monitor (10) (i.e. a tilt-sensitive switch) comprises:

a piezoelectric transducer device acting as a sensitive orientation sensor (14) (i.e. tilt-sensitive transducer) that produces an output signal in response to a user's activity (i.e. a user manipulating said transducer) (column 2 lines 60 to 67; column 7 line 32 to column 8 line 11; see Figures 1A and 5A-C);

an amplifier/detector (24) connected to an analog/digital converter (22) (i.e. a differentiator) adapted to receive to said output signal from the sensor unit (14) (column 4 lines 15 to 23; see Figure 1A); and

a control unit (12) (i.e. means), connected to said amplifier/detector (24) connected to an analog/digital converter (22) for performing an audible feedback (i.e. a first switching function) (column 4 lines 49 to 67; column 6 lines 22 to 66; see Figures 1 to 5).

However, Allen et al. did not explicitly disclose determine a rate-of-change of said output signal.

In the same field of endeavor of devices for controlling apparatus, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to increase the effectiveness of the anti-overturning system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a processor to determines the rate of increase in tilt angle using the lateral level sensor taught by Levy in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. because determining the rate of increase in tilt angle would provide accurate feedback on their current level of activity based at least in part on the determined rate-of-change of the lateral level sensor.

Referring to Claims 2-3, Allen et al. in view of Levy disclose the switch as claimed in Claim 1, Allen et al. disclose in which said sensitive orientation sensor (14) (i.e. said tilt-sensitive transducer) comprises a transducer that produces an output signal proportional to said input (column 2 lines 60 to 67; column 7 line 43 to column 8 line 11; see Figures 5A-C);

Referring to Claim 96, Allen et al. in view of Levy disclose the switch as claimed in Claim 1, Allen et al. disclose wherein the output signal is related to a change in orientation of the transducer (column 7 line 66 to column 8 line 11; column 8 lines 60 to 67; see Figures 5A to 5C).

Referring to claims 4, 9, 15-16, 31, 50-51, 81, 85 and 89, Allen et al. in view of Levy disclose a method and an activity monitor (10) (i.e. a switch), to the extent as claimed with respect to claim 1 above, the switch comprises:

a piezoelectric transducer device acting as a sensitive orientation sensor (i.e. tilt-sensitive transducer) that produces an output signal in response to a user's activity (i.e. a user input) (column 2 lines 60 to 67; column 7 line 43 to column 8 line 11; see Figures 1A and 5A-C);

an amplifier/detector (35) connected to an analog/digital converter (22) (i.e. a first differentiator) adapted to receive to said output signal from the sensor unit (14) (column 4 lines 15 to 23; see Figure 1A);

an amplifier/detector (36) connected to an analog/digital converter (22) (i.e. a second differentiator) adapted to receive to said output signal from the sensor unit (15) (column 4 lines 15 to 23; see Figure 1B); and

a control unit (12) (i.e. means), connected to said amplifier/detector (24) connected to an analog/digital converter (22) for performing an audible feedback (i.e. a first switching function) based on sense acceleration in direction parallel to either longitudinal axis or orthogonally oriented longitudinal axis (i.e. rate-of-change) (column 4 lines 42 to 67; column 7 lines 43 to 56; column 8 line 60 to column 9 line 8; see Figures 1 to 5).

Referring to Claim 5, Allen et al. in view of Levy disclose the switch as claimed in Claim 4, Allen et al. disclose which further comprises means, connected to said first differentiator, for performing a video output signal on visual display counter units (18 and 19) (i.e. a second switching function) (column 4 lines 15 to 23; column 6 lines 58 to 66; see Figure 1A).

Referring to Claims 10, 82 and 86, Allen et al. in view of Levy disclose the switch as claimed in Claims 76, 81 and 85, Allen et al. disclose in which said producing step comprises: attaching a transducer to a person; and body-member actuating said transducer (column 7 lines 57 to 65; see Figure 4).

Referring to Claims 11-12, Allen et al. in view of Levy disclose the switch as claimed in Claim 9, Allen et al. disclose in which said method further comprises differentiating said output signal a second time; and

said performing step comprises performing said first switching function in response to said second differentiating step (column 4 lines 42 to 67; column 9 lines 23 to 45).

Referring to Claims 13-14, 32-33, 52, 63, 74, 92-94, Allen et al. in view of Levy disclose the switch as claimed in Claims 9, 31 and 50, Allen et al. disclose in which said method further comprises: performing said first switching function when said output signal is increasing; performing a second switching function when said output signal is decreasing; and producing a logic output as a function of both of said switching functions (column 3 lines 57 to column 4 line 14; column 6 line 58 to column 7 line 5; see Figures 2-3).

Referring to Claim 35, Allen et al. in view of Levy disclose the method as claimed in Claim 31, Allen et al. disclose in which said method further comprises activating control of audio output unit (16 or video output units) (i.e. any apparatus) in response to said output function (i.e. a switching function) (column 6 lines 31 to 50; column 9 line 59 to column 10 line 15).

Referring to Claims 90-91, Allen et al. in view of Levy disclose the method as claimed in Claims 31 and 89, Allen et al. disclose in which said method further comprises controlling c control unit (10) (i.e. an apparatus) in response to said output signal of A/D (22) (column 4 lines 14 to 23; column 7 lines 57 to 65; see Figure 4).

2. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable Allen et al. (US# 5,749,372) in view of Levy (US# 5,742,228) as applied to claim 63 above, and in view of Muller (US# 4,865,610).

Referring to Claim 75, Allen et al. in view of Levy disclose the switch as claimed in Claim 63, Allen et al. disclose in which said method further comprises: performing said first switching function in response to a predetermined rate-of-change of said output signal produced by user actuation of said transducer in the other of said directions (column 3 lines 57 to column 4 line 14; column 6 line 58 to column 7 line 5; see Figures 2-3). However, Allen et al. in view of Levy did not explicitly disclose means for producing a third switching function.

In the same field of endeavor of devices for controlling apparatus, Muller et al. teach that output signals according to the X and Y directions (column 3 lines 55 to 68; column 6 lines 57 to column 7 line 3) in order to processed into the data necessary and suitable for the control of complex appliances.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a method of generating plurality of output signals according to the X and Y direction to create unlimited number of signals taught by Muller in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. in view of Levy because producing plurality of output signals according to the direction of movement would improve unlimited number of signals to processed into the data necessary and suitable for the control of complex apparatuses.

3. Claims 36-42, 47 and 76-80 is rejected under 35 U.S.C. 103(a) as being unpatentable Allen et al. (US# 5,749,372) in view of Levy (US# 5,742,228) and in view of Elwell (US# 5,394,035).

Referring to Claim 76, Allen et al. in view of Levy disclose a method, to the extent as claimed with respect to claim 4 above, however, Allen et al. in view of Levy did not explicitly disclose providing a mode of operation in which a rate of change of the output signal is below a threshold rate of change; and performing said switching function in response to the rate-of-change of said output signal exceeding said threshold rate of change.

In an analogous art, Elwell discloses providing a mode of operation in which a rate of change of the output signal is below a threshold rate of change (column 4 line 67 to column 5 lines 18); and performing said switching function in response to the rate-of-change of said output signal exceeding said threshold rate of change (column 6 lines 44 to 56; column 7 lines 1 to 4) in order to detect an event to be monitored for controlling an equipment.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a detection by a rate of change comparator responsive to the output of the transducer taught by Elwell in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. in view of Levy because using a comparator for comparing a rate of change of a threshold value would change in the operation of the equipment to provide feedback more reliable.

Referring to Claim 37, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said method further comprises controlling c control unit (10) (i.e. an apparatus) in response to said output signal of A/D (22) (column 4 lines 14 to 23; column 7 lines 57 to 65; see Figure 4).

Referring to Claims 77-78, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said producing step comprises actuating an input (column 3 lines 57 to 66; column 7 lines 33 to 42; see Figures 4 and 5).

Referring to Claim 79, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose further comprising adjusting said threshold rate-of-change (column 7 lines 43 to 56).

Referring to Claim 80, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said performing step comprises differentiating said output signal (column 4 lines 42 to 67; column 8 lines 12 to 29).

Referring to Claims 36, 38 and 40-41, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said method further comprises activating control of audio output unit (16 or video output units) (i.e. any apparatus) in response to said output function (i.e. a switching function) (column 6 lines 31 to 50; column 9 line 59 to column 10 line 15).

Referring to Claim 39, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said method further comprises:

If activity level reach or exceed intensity level, the generating an output beep (i.e. activating control of an apparatus in response to said switching function being performed inside a window of opportunity); and if activity level does not reach or exceed intensity level generating no feedback to the user (i.e. aborting said activating step in response to said switching function being performed outside said window of opportunity) (column 4 lines 37 to 67; see Figures 2 and 3).

Referring to Claim 42, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said method further comprises: activating a selected one of a first or a second apparatus in response to performing said switching function during a window of opportunity; and proportionally controlling a function of said selected apparatus as a function of said output signal (column 4 lines 42 to 67; column 6 lines 22 to 30; column 9 lines 23 to 45).

Referring to Claim 47, Allen et al. in view of Levy and in view of Elwell disclose the method as claimed in Claim 76, Allen et al. disclose in which said method further comprises initiating cascading a plurality of task opportunities; and said initiating step comprises performing said switching function (column 6 lines 31 to 66; column 8 line 60 to column 9 line

8; see Figures 2 and 3).

Claim Objections

Claims 17, 19, 43-46 and 48-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as stated in previously office action.

Referring to claim 17, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest the limitations that refraining from said momentary-contact switching step during a second time delay that follows said window of opportunity; and initiating operation of a first electrical device subsequent to successful completion of the preceding steps.

Referring to claim 43-44, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest the limitations that

activating a selected one of a first or a second apparatus in response to performing said switching function during a window of opportunity;

selecting a function of said selected apparatus to be controlled; and

said selecting step comprises performing other switching function.

Referring to claim 45-46, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest the limitations that

initiating cascading a plurality of task opportunities;

selecting a task; and

said selecting step comprises performing said switching function.

Referring to claim 48-49, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest the limitations that

initiating cascading a plurality of task opportunities; and

said initiating step comprises performing said switching function;

selecting a task; and

said selecting step comprises performing an other switching function.

(10) Response to Argument

Section A.

Appellant has no argument in this section. Brief description of the art applied to the rejected claims only.

Section B.

Appellant has no argument in this section. Summary of Appellant's pending application/invention or claims only.

Section C.

Appellant has no argument in this section. Summary of Appellant's arguments in other sections only.

Section D.

1. With respect to Claims 1-5, 9-16, 31-35, 50-52, 62-63, 74 and 81-96, the appellant argues in section **D.1**, page 9, that the Office Action relied on impermissible hindsight to combine Allen et al. with Levy.

In response to Applicant's argument that there is no suggestion to combine the references or impermissible hindsight, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated in the references. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971).

Allen et al. disclose an activity monitor (10) (i.e. a tilt-sensitive switch) comprises: a piezoelectric transducer device acting as a sensitive orientation sensor (14) (i.e. tilt-sensitive transducer) that produces an output signal in response to a user's activity (i.e. a user manipulating said transducer) (column 2 lines 60 to 67; column 7 line 32 to column 8 line 11; see Figures 1A and 5A-C); an amplifier/detector (24) connected to an analog/digital converter (22) (i.e. a differentiator) adapted to receive to said output signal from the sensor unit (14) (column 4 lines 15 to 23; see Figure 1A); and a control unit (12) (i.e. means), connected to said amplifier/detector (24) connected to an analog/digital converter (22) for performing an audible feedback (i.e. a first switching function) (column 4 lines 49 to 67; column 6 lines 22 to 66; see Figures 1 to 5). However, Allen et al. did not explicitly disclose determine a rate-of-change of said output signal.

In an analogous art of device for controlling apparatus, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to increase the effectiveness of the anti-overturning system. Levy teaches it has been determined that knowledge of the tilt angle in itself may be insufficient to prevent overturning of the bin of a tipper truck during the raising of the bin for purposes of unloading includes a lateral level sensor to sense the lateral orientation of the tipper truck. For example, because of the large mass and momentum of the truck and bin, a rapid increase in tilt angle may be such that by the time a critical tilt angle is reached it may be too late to prevent the overturning. Thus, it is important to monitor the rate of change of the tilt in addition to the monitoring the tilt itself so as to increase the effectiveness of the anti-overturning

system by providing interrupting the raising of the bin(column 4 lines 21 to 32; column 5 lines 18 to 21; see Figures 4-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a processor to determines the rate of increase in tilt angle of the lateral and longitudinal level using the lateral level sensor taught by Levy in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. because determining the rate of increase in tilt angle would provide accurate feedback on their current level of activity based at least in part on the determined rate-of-change of the lateral level sensor by varying the rate of an audible tone output to reflect an actual and current activity level in the activity monitoring device.

2. The appellant argues on section **D.2**, page 11, that Levy is Non-Analogous art.

In response to Appellant's argument that Levy is not analogous art, it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174. In this case, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to increase the effectiveness of the anti-overturning system. Levy teaches it has been determined that knowledge of the tilt angle in itself

may be insufficient to prevent overturning of the bin of a tipper truck during the raising of the bin for purposes of unloading includes a lateral level sensor to sense the lateral orientation of the tipper truck. Thus, it is important to monitor the rate of change of the tilt in addition to the monitoring the tilt itself so as to increase the effectiveness of the anti-overturning system (column 4 lines 21 to 32; column 5 lines 18 to 21; see Figures 4-6). Levy also disclose a mechanism may be provided for interrupting the raising of the bin, the mechanism being responsive to the processor automatically (column 5 lines 18 to 25; column 5 lines 47 to 59) in order to identify dangerous rates of change significantly before a critical angle is reached. Clearly, using the level sensors is to determine the rate of change of the flip. Therefore, Levy is within analogous art that sense acceleration or movement to determine a user reaches or exceeds a minimum threshold number of acceleration or movement during a brief and a predetermine time interval.

Furthermore, Levy discloses the processor processes the output of the lateral level sensor to calculate a rate of change of lateral inclination, a mechanism provided for interrupting the raising of the bin, the mechanism being responsive to the processor. A rapid increase in tilt angle may be such that by the time a critical tilt angle is reached it may be too late to prevent the overturning. Thus, it is important to monitor the rate of change of the tilt in addition to the monitoring the tilt itself so as to increase the effectiveness of the anti-overturning system (column 4 lines 21 to 32). Allen et al. disclose monitoring activity device includes varying the rate of an audible tone output to reflect an actual and current activity level using the sensor units (14 and 15). A threshold acceleration sufficient to indicate activity performance by the user while performing an exercise activity such as jogging or walking. Other levels of acceleration

may be more suitable for monitoring forms of user activity other than walking (column 4 lines 14 to 61). Clearly, Allen et al. determines the threshold acceleration sufficient to indicate activity performance by the user to varying the rate of change of an audible tone output to reflect an actual and current activity level. Therefore, Levy and Allen et al. both disclose calculation the rate of change of lateral inclination or activity intensity level. In other words, Levy is an analogous art.

3. The appellant argues on section **D.3**, page 13, that the combination of Allen et al. and Levy is inoperable.

As discuss above, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to provide output of the lateral level sensor for interrupting the raising of the bin during the raising of the bin for purposes of unloading. Having the lateral level sensor to sense the lateral orientation and longitudinal level sensor for sensing the longitudinal inclination would provide activity performance of a device. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a processor to determines the rate of increase in tilt angle of the lateral and longitudinal level using the lateral level sensor and longitudinal level sensor taught by Levy in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. because determining the

rate of increase in tilt angle would provide accurate feedback on their current level of activity based at least in part on the determined rate-of-change of the lateral level sensor.

4. The appellant argues on section **D.4**, page 15, that the combination of Allen et al. and Levy fails to disclose all of the features in the independent claims 1, 4, 9, 15, 31, 50, 62-63, 81, 85 and 89.

Allen et al. disclose an activity monitor (10) adjusts or switches feedback depending on the output of transducers in three dimensions(i.e. a tilt-sensitive switch) (column 2 line 60 to column 3 line 5; column 7 lines 43 to 56) comprises:

piezoelectric transducer devices acting as a sensitive orientation sensor (14) (i.e. tilt-sensitive transducer) that produces an output signal in response to a user's activity in three dimensions (i.e. a user

manipulating said transducer) (column 2 lines 60 to 67; column 7 line 32 to column 8 line 11; see Figures 1A and 5A-C); an amplifier/detector (24) connected to an analog/digital converter (22) (i.e. a differentiator) adapted to receive to said output signal from the sensor unit (14) (column 4 lines 15 to 23; see Figure 1A); and a control unit (12) (i.e. means), connected to said amplifier/detector (24) connected to an analog/digital converter (22) for performing an audible feedback (i.e. a first switching function) (column 4 lines 49 to 67; column 6 lines 22 to 66; see Figures 1 to 5).

However, Allen et al. did not explicitly disclose determine a rate-of-change of said output signal.

In an analogous art of controlling apparatus, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to increase the effectiveness of the anti-overturning system. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a processor to determines the rate of increase in tilt angle using the lateral level sensor taught by Levy in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. because determining the rate of increase in tilt angle would provide accurate feedback on their current level of activity based at least in part on the determined rate-of-change of the lateral level sensor.

Clearly, Allen et al. in view of Levy disclose all of the features in the independent claims 1, 4, 9, 15, 31, 50, 62-63, 81, 85 and 89.

5. The appellant argues on section **D.5**, page 18, that the dependent claims 2-3, 5, 10-14, 32-35, 51-52, 74, 82-84, 86-88 and 90-95 are allowable for at least the reason that these claims depend from and include the element of allowable independent claims.

As discussed above, Allen et al. in view of Levy disclose all of the features in the independent claims 1, 4, 9, 15, 31, 50, 62-63, 81, 85 and 89. The dependent claims 2-3, 5, 10-14, 32-35, 51-52, 74, 82-84, 86-88 and 90-95 are not allowable for at least the reason discussed above.

Section E.

The appellant argues on section **E**, page 19, that the dependent claims 75 are allowable for at least the reason that these claims depend from and include the element of allowable independent claim 63.

As discussed above, Allen et al. in view of Levy disclose all of the features in the independent claim 63. The dependent claim 63 is not allowable for at least the reason discussed above. Furthermore, Muller et al. teach that output signals according to the X and Y directions (column 3 lines 55 to 68; column 6 lines 57 to column 7 line 3) in order to processed into the data necessary and suitable for the control of complex appliances.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a method of generating plurality of output signals according to the X and Y direction to create unlimited number of signals taught by Muller in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. in view of Levy because producing plurality of output signals according to the direction of movement would improve unlimited number of signals to processed into the data necessary and suitable for the control of complex apparatuses.

Section F.

The appellant argues on section **F**, page 19, that the combination of Allen et al. and Levy and Elwell fails to disclose all of the features in the claims 36-42, 47 and 76-80.

As discussed above, Levy teaches a processor determines a rate-of-change of said tilt from a lateral level sensor (16) (i.e. a tilt-sensitive sensor) (column 4 lines 21 to 32; see Figures 4-6) in order to increase the effectiveness of the anti-overturning system. However, Allen et al. in view of Levy did not explicitly disclose providing a mode of operation in which a rate of change of the output signal is below a threshold rate of change; and performing said switching function in response to the rate-of-change of said output signal exceeding said threshold rate of change.

In an analogous art, Elwell discloses providing a mode of operation in which a rate of change of the output signal is below a threshold rate of change (column 4 line 67 to column 5 lines 18); and performing said switching function in response to the rate-of-change of said output signal exceeding said threshold rate of change (column 6 lines 44 to 56; column 7 lines 1 to 4) in order to detect an event to be monitored for controlling an equipment.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need for a detection by a rate of change comparator responsive to the output of the transducer taught by Elwell in the method for monitoring activity and providing feedback to a user concerning activity level performance of Allen et al. in view of Levy because using a comparator for comparing a rate of change of a threshold value would change in the operation of the equipment to provide feedback more reliable.

Section G.

The appellant argues on section **G**, page 20, that the objection claims 17, 19, 43-46 and 48-49 are allowable in their present form for at least the reason that these claims depend from and include the element of allowable independent claims 15 and 76.

As discussed above, Allen et al. in view of Levy and in further view of Elwell disclose all of the features in the independent claims 15 and 76. The dependent claims 15 and 76 are not allowable for at least the reason discussed above. Therefore, the objection claims 17, 19, 43-46 and 48-49 are allowable in their present form.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/N. V. N./

Examiner, Art Unit 2612

Conferees:

/George A Bugg/
Supervisory Patent Examiner, Art Unit 2612

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612

Valenti, Hanley & Robinson, PLLC

One Riverfront Plaza

401 W. Main Street

Louisville KY 40202